XT300C, XT302C Deluxe Programmable Heat-Cool Thermostats



(XT300C shown)

OWNER'S GUIDE

Pub. No. 22-5127-04

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CUSTOMIZING YOUR THERMOSTAT

Program Options Set-Up by Your Trane Dealer

Your Trane dealer has programmed your thermostat using the options checked below. For example, your thermostat displays temperatures in degrees Fahrenheit if the checkbox next to *Fahrenheit (°F)* is checked. Contact your Trane dealer to reprogram any of the options listed.

NOTE: If no options are checked, those listed in the first column are the factory settings on your thermostat.

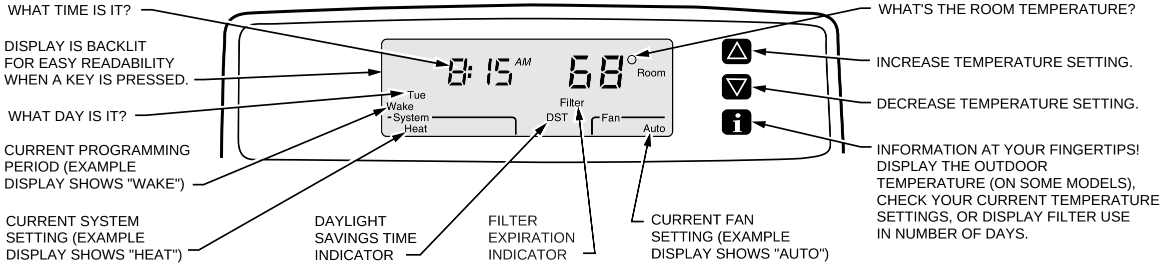
Refer to the Definitions section for a description and comparison of Adaptive Intelligent Recovery™ Control (a Honeywell trademark) to Conventional recovery.

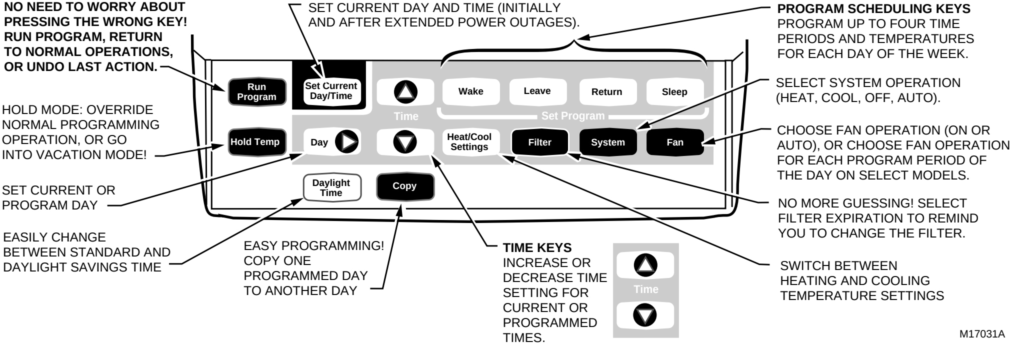
Comfort-R™ Control	❑ Off	❑ On	
Adaptive Intelligent Recovery™ Control	❑ On	❑ Off (Conventional recovery)	
Cooling Droop	❑ On	❑ Off	
Temperature Display	❑ Fahrenheit (°F)	❑ Centigrade (°C)	
Clock Format	❑ 12-Hour Clock Format	❑ 24-Hour Clock Format	
System Setting (Heating and Cooling Setting)	❑ Auto/Manual (System automatically selects Heat or Cool; You can select Heat, Cool or Off.)	❑ Manual Only (You select Heat, Cool or Off.)	❑ Auto only (System automatically selects Heat or Cool.)
Outdoor Temperature Display	❑ No outdoor temperature is displayed	❑ Outdoor temperature is displayed (requires an outdoor sensor).	
Programming	❑ 7-Day Programming	❑ 24-Hour Programming	❑ Constant Temperature Setpoint Programming

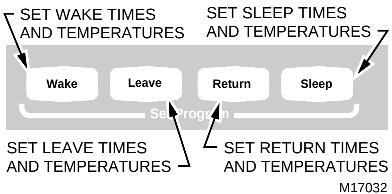
NOTE: The XT300C, XT302C thermostats are manufactured for the Trane Company by Honeywell Inc. Specific features are unique to Trane and are only available on Trane models.

GETTING AROUND THE KEYBOARD

The keyboard is located behind the thermostat cover. Three frequently used keys are located next to the display (Increase temperature setting, Decrease temperature setting, and Information key). The thermostat displays important information such as day, time, schedule period, temperature, filter indicator, system and fan operation.




NO NEED TO WORRY ABOUT PRESSING THE WRONG KEY! RUN PROGRAM, RETURN TO NORMAL OPERATIONS, OR UNDO LAST ACTION.
SET CURRENT DAY AND TIME (INITIALLY AND AFTER EXTENDED POWER OUTAGES).
PROGRAM SCHEDULING KEYS
PROGRAM UP TO FOUR TIME PERIODS AND TEMPERATURES FOR EACH DAY OF THE WEEK.
Run Program
Set Current Day/Time
Time
Wake
Leave
Return
Sleep
Set Program
SELECT SYSTEM OPERATION (HEAT, COOL, OFF, AUTO).
HOLD MODE: OVERRIDE NORMAL PROGRAMMING OPERATION, OR GO INTO VACATION MODE!
Hold Temp
Day
Heat/Cool Settings
Filter
System
Fan
CHOOSE FAN OPERATION (ON OR AUTO), OR CHOOSE FAN OPERATION FOR EACH PROGRAM PERIOD OF THE DAY ON SELECT MODELS.
SET CURRENT OR PROGRAM DAY
Daylight Time
Copy
NO MORE GUESSING! SELECT FILTER EXPIRATION TO REMIND YOU TO CHANGE THE FILTER.
EASILY CHANGE BETWEEN STANDARD AND DAYLIGHT SAVINGS TIME
EASY PROGRAMMING! COPY ONE PROGRAMMED DAY TO ANOTHER DAY
TIME KEYS
INCREASE OR DECREASE TIME SETTING FOR CURRENT OR PROGRAMMED TIMES.
Time
SWITCH BETWEEN HEATING AND COOLING TEMPERATURE SETTINGS
M17031A


SET WAKE TIMES AND TEMPERATURES
SET SLEEP TIMES AND TEMPERATURES
Wake
Leave
Return
Sleep
Set Program
SET LEAVE TIMES AND TEMPERATURES
SET RETURN TIMES AND TEMPERATURES
M17032

FEATURES

- Worry-free programming.
- Comfort-R Comfort Enhancement Process—a unique Trane feature.
- Adaptive Intelligent Recovery Control for comfort and energy savings.
- Wake, Leave, Return and Sleep at the comfort level you select.
- Customize the program schedule—program your own schedule to fit your needs.
- Continuous comfort and energy savings—adjust the schedule as often as you like.
- Temporary schedule override—set the thermostat higher or lower for the current program schedule.
- Vacation mode (1 to 255 days) for added comfort and energy savings. Set the temperature higher or lower for energy savings while on vacation. At the same time, set the comfort level you want when you return.
- Permanent schedule override—set the thermostat higher or lower indefinitely.
- Set the filter indicator (0, 7, 14, 21, 30, 45, 60, 90, 120, 180, 270, or 360 days) to remind you to change the filter.
- Information at the press of a button—use the Information Key to find out the outdoor temperature (optional accessory), the current setpoints, or the filter status.
- No batteries needed—your thermostat retains the schedule for the life of the product. You never have to reprogram the schedule even after a power outage. (The day and time may need to be reset after an extended power outage.)
- Set or reset the day and time as needed—you can even set Daylight Savings Time.

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FEATURES YOU'LL WANT TO KNOW MORE ABOUT

Comfort-R Comfort Enhancement System

Comfort can best be described as the proper balance of temperature and relative humidity, also known as "your comfort index." The greatest level of comfort is achieved when the temperature and relative humidity are in balance with your body. When the relative humidity is low, you feel comfortable at a higher temperature. Likewise, when the relative humidity is high, you feel comfortable only at a lower temperature. However, if the relative humidity becomes too high, then true comfort cannot be achieved at any temperature.

The Comfort-R™ system is specifically designed to enhance the moisture removal process of your air conditioning system and to make the air drier. This system is so unique, it received a patent from the U.S. Patent Office. During times of high relative humidity, as well as during mild weather, the Comfort-R system increases the moisture removal ability of your air-conditioning system. This results in a lower relative humidity inside your home, which in turn, allows you to feel more comfortable. The resulting lower relative humidity also allows you to maintain the temperature setting on your thermostat at a higher temperature.

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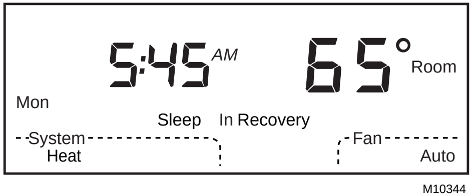
Adaptive Intelligent Recovery Control

Your Thermostat Senses Temperature More Like You Do

Your new thermostat is so smart, it's almost human. You perceive temperature from a variety of sources, not only from the air in the room, but also from your surrounding walls, windows and furnishings. Humans feel differences in temperature as slight as two degrees Fahrenheit. Common household thermometers and standard thermostats sense only air temperature, which may not reflect how hot or cold the room actually feels to you. Your new thermostat reads both the temperature of the wall and the air, and responds to temperature changes as little as one degree Fahrenheit, so room temperature is more likely to feel right to you and your family.

The Deluxe Programmable Heat-Cool Thermostat acts like a computer. When calculating the time to turn on your heating or cooling system, it considers (1) air temperature, (2) wall temperature, and (3) the time you want to reach the comfort temperature. After considering these three things, Adaptive Intelligent Recovery™ control gradually changes the temperature from the energy savings setting to the comfort setting (for example, from a heating temperature of 62° at night to 70° in the morning).

The system runs continuously until the comfort temperature you choose is reached without overshooting the setting. This saves energy. How do you know when the system is in recovery? The thermostat displays *In Recovery* whenever the thermostat activates Adaptive Intelligent Recovery Control. So, *In Recovery* displays during the recovery time from Sleep to Wake and from Leave to Return.



***In Recovery* indication shown in example above.**

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After installation or new schedule programming, your thermostat learns from experience. How? Each day it checks how closely it hit the recovery target (for example, 70° at 6:00 AM) and adjusts the next day's recovery start time accordingly. After four to eight days, the thermostat has adjusted to local weather, your lifestyle, the construction of your home, and your heating and cooling system.

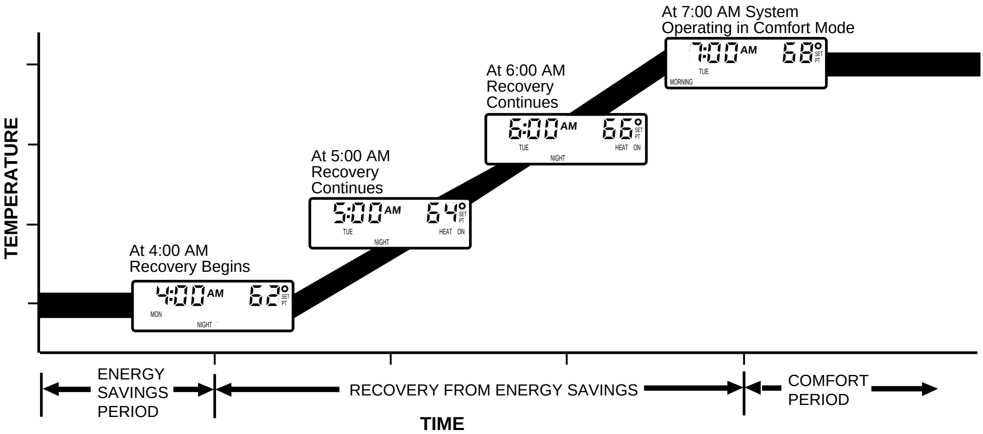
The Optimum Comfort and Energy Savings Solution

In this example, Adaptive Intelligent Recovery Control starts to recover at 4:00 AM and reaches the comfort temperature of 68° at 7:00 AM. Recovery time varies with the starting temperature and the comfort temperature you choose.

Your new thermostat saves energy and keeps you comfortable at the same time. By now you may be wondering how to program your thermostat and how to use some more time and energy-saving features.

First, let's look at features you'll be using often, like how to override the current programming mode or hold the thermostat at a specific temperature while you go on vacation. You can even program the thermostat to return to normal scheduled programming on your last day of vacation so you don't have to worry about energy saving while you are gone or not being comfortable when you return.

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THE THERMOSTAT USES THE SAME SCHEME TO RETURN GRADUALLY TO LOWER COMFORT TEMPERATURE DURING THE COOLING SEASON.

M17033

NEAT STUFF YOU'LL BE USING OFTEN

Setting Temporary Temperatures

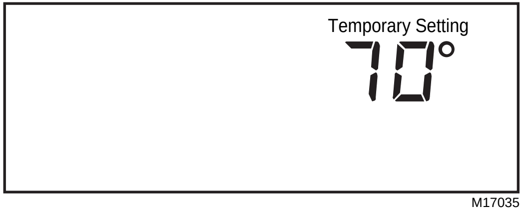
If your thermostat is set for 7-Day or 24-Hour Operation, you can override the current schedule period and change the temperature setting until the next schedule period, or change the temperature setting while you are on vacation. You can also change the temperature setting indefinitely.

Changing Temperature Setting Until the Next Schedule Period

NOTE: This feature does not apply to Constant Temperature Setpoint Programming.



Press **Increase ▲** or **Decrease ▼** until the desired temperature setpoint displays.



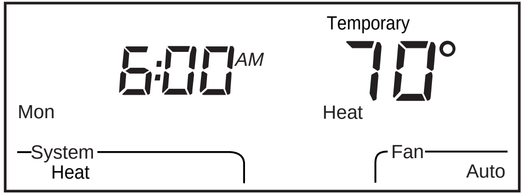
While selecting a temporary setting, only the setpoint displays.

The temporary temperature setting you select displays for approximately 3 seconds. The display reads *Temporary* until the next period begins, or you cancel the Hold.



IMPORTANT

*To cancel the Hold before the designated time, press **Run Program**.*



M12984

After selecting a temporary setting, display reads Temporary until canceled.
Example displays shows temporary heat setting of 70° at 6:00 AM.

NOTE: If "▲" or "▼" appears under the temperature display, it means that both the heating and cooling setpoints are being adjusted. Tapping the key changes both the heat and cool setpoints by one degree. Press **i** after the desired setpoint is reached to verify the setpoints.

NOTE: While in temporary operation, the thermostat uses conventional recovery for that period only. The thermostat assumes you desire to maintain the temporary setting until the end of the period.

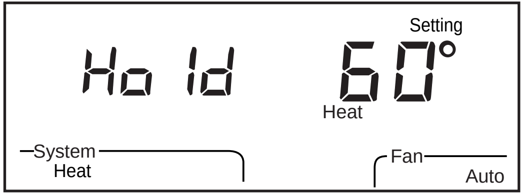
Changing Temperature Setting Indefinitely

NOTE: This feature does not apply to Constant Temperature Setpoint Programming.

NOTE: The current time does not display while in this mode.



1. Press **Hold Temp** once.



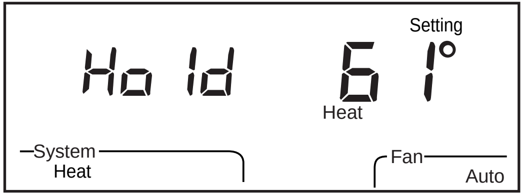
M17040

Pressing Hold Temp once displays the thermostat in Hold mode. Example displays shows temporary heat setting of 60°.

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2. Press **Increase ▲** or **Decrease ▼** to change the temperature setpoint, if desired.

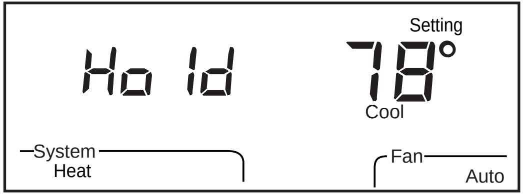


M17041

By pressing the Temperature keys, you can select a temporary temperature. This temperature setting remains until the hold is canceled. Example displays shows heat set to 61°.



3. Press **Heat/Cool Settings** to change between heat and cool settings.

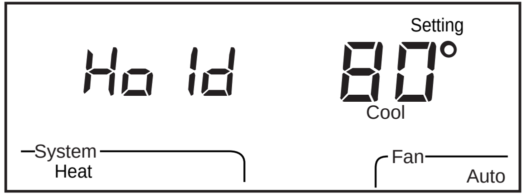


M17042

Pressing Heat/Cool Settings displays the other temperature setpoint. Example displays shows temporary cooling setting of 78°.



4. Press **Increase ▲** or **Decrease ▼** to adjust temperature settings.



M17043

Pressing the Temperature keys changes the temporary temperature. Example displays shows temporary cooling setting of 80°.

NOTE: The display changes from the setpoint to the room temperature after approximately 3 seconds.



IMPORTANT

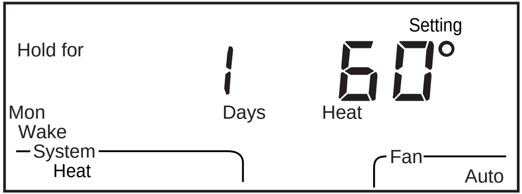
*To cancel the Hold, press **Run Program**.*

Vacation Mode

NOTE: This feature does not apply to Constant Temperature Setpoint Programming.

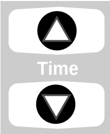


1. Press **Hold Temp** twice.

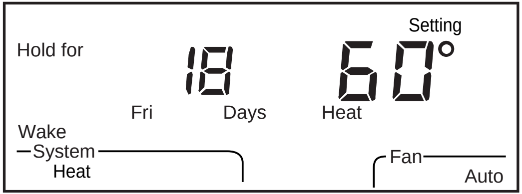


M17036

Pressing Hold Temp twice displays the thermostat in Vacation mode. Example displays shows temporary heat setting of 60°.



2. Press **Time** ▲ or **Time** ▼ until the desired number of days displays (1 to 255 days).

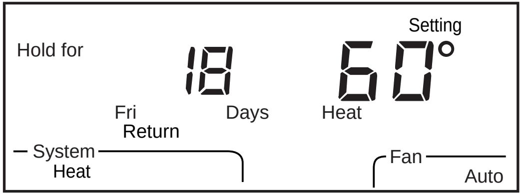


M17037

By pressing the Time keys, the number of vacation days is selected. Example displays shows 18 vacation days.

3. Press **Wake**, **Leave**, **Return** or **Sleep** to select the period the Hold will stop.





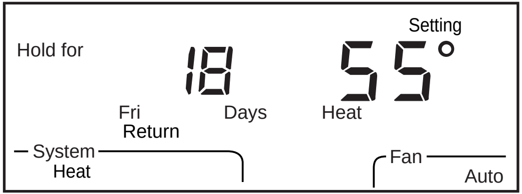
M17038

In this example, the Hold will stop after the 18th day at the beginning of the Return period.

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4. Press **Increase** ▲ or **Decrease** ▼ to adjust the temperature setting, if desired.



M17039

By pressing Temperature keys, a new hold temperature is selected. Example display shows temporary heat setting of 55°.

NOTE: Only the heating temperature is used when the System is set to Heat. Similarly, only the cooling temperature is used when the System is set to Cool. The thermostat uses both the heating and cooling temperatures when the System is set to Auto.



5. Press **Heat/Cool** Settings to change between heat and cool settings.



6. Press **Increase** ▲ or **Decrease** ▼ to adjust the temperature setting, if desired. (Example: Cool 84° = cooling equipment operates when the room temperature is above 84°F)



IMPORTANT

*To cancel the Hold before the designated time, press **Run Program**.*

**Pressed the wrong key?
Want to start over?**

Don’t worry! You can always press



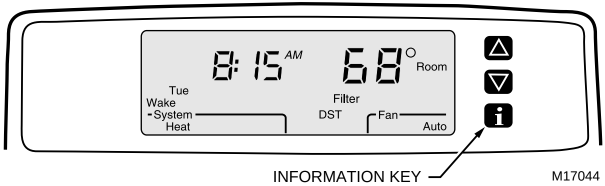
to return display to normal.

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Information Key

The Information key provides information at your fingertips. The sequence of key presses is as follows:

- Outdoor Temperature (if equipped)
- Current Setpoint of Mode in Use (Heat or Cool)
- Setpoint of Mode Not Currently in Use
- Filter Status



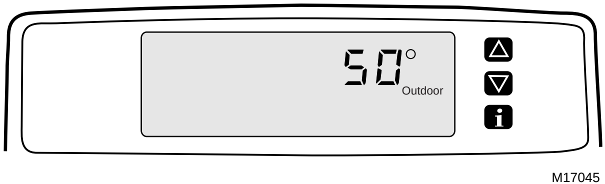
If the filter status is expired (refer to *Filter Indication* section), the sequence of key presses is as follows:

- Filter Status
- Outdoor Temperature (if equipped)
- Current Setpoint of Mode in Use (Heat or Cool)
- Setpoint of Mode Not Currently in Use

Displaying Outdoor Temperature

Press once to display the outdoor temperature (if equipped).

NOTE: If the filter status is expired, press twice to display outdoor temperature.



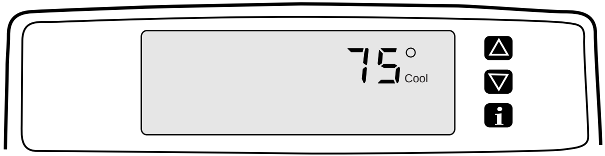
Pressing key once displays the outdoor temperature. Example displays shows outdoor temperature at 50°.

Displaying Current Settings

i Press i twice to check the current temperature setpoint. Press i three times to check the temperature setpoint of the mode not currently in use.

NOTE: Without outdoor temp. sensor, press i once to display current setpoint; twice for opposite setpoint.

NOTE: If the filter status is expired, press i three times to check current temperature setpoint, if equipped w/outdoor sensor.



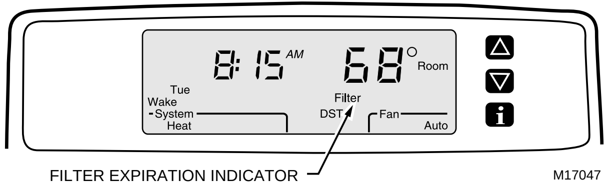
M17046

Pressing i key twice displays current setpoint. Example displays shows cooling setpoint of 75°.

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Filter Indication

Your thermostat monitors the time the fan is running and lets you know when to replace the filter, based on the number of fan run-time days you select. Upon expiration, the thermostat displays *Filter* and the backlight flashes during the Wake and Return modes.



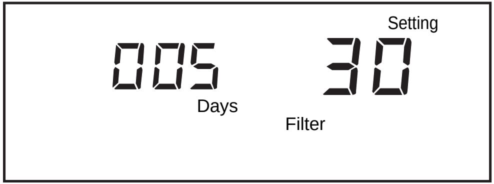
To temporarily cancel the flashing display, press i

Setting or Resetting Filter Indication Timer

Your thermostat comes preset to the 30-day setting. To change this setting, or reset after filter expiration, follow these instructions:



1. Press **Filter** to enter the Filter mode.

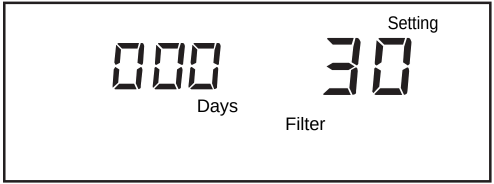


M17048

Pressing the Filter key displays filter information.
In this example, current fan run time is 5 days and the filter is set to expire in 30 days.



2. Press and hold **Filter** for at least 3 seconds to reset fan run time to zero.



M17049

Holding down the Filter key resets counter to “0” days.

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3. Press **Time ▲** or **Time ▼** until the desired number of days displays (0, 7, 14, 21, 30, 45, 60, 90, 120, 180, 270, or 360).



4. Press **Run Program** to return to normal operation.

IMPORTANT

To track the time the fan is running, you must select a setting other than 0. If the setting is 0 days, the display will always show "0 Days; 0 Setting" when Filter is pressed.

PROGRAMMING YOUR THERMOSTAT

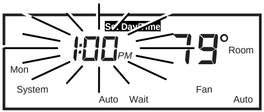
Clock

Setting Current Day and Time

IMPORTANT

Always press the keys with your fingertip or similar blunt tool. Sharp instruments like pens and pencil points will damage the keyboard.

On initial power up or after an extended power loss, **1:00 PM** flashes on the display until a key is pressed.



M12950

Pressed the wrong key? Want to start over?

Don’t worry! You can always press

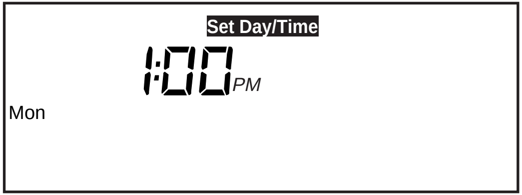


to return display to normal.

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1. Press **Set Current Day/Time**.



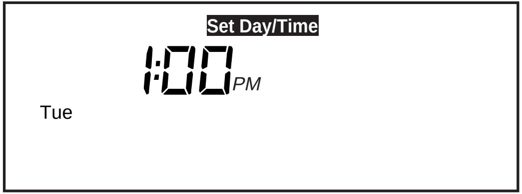
M17050

Pressing Set Current Day/Time displays the information shown.



2. Press **Day** until the current day displays.

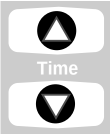
   NOTE: Mon = Monday, Tue = Tuesday,
   Wed = Wednesday,
   Thu = Thursday, Fri = Friday,
   Sat = Saturday, Sun = Sunday.



M17051

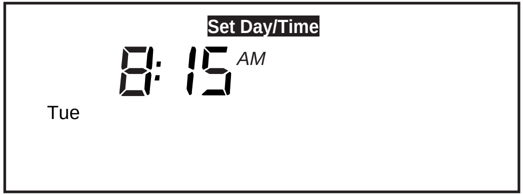
By Pressing Day, you can set the current day.
Example display shows Tuesday.

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3. Press **Time ▲** or **Time ▼** until the current time displays.

NOTE: Tapping **Set Current Day/ Time** advances the time in one-hour increments.

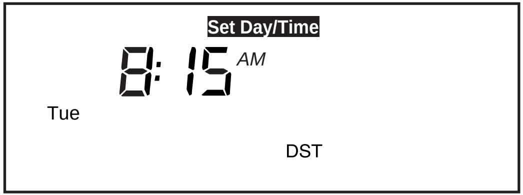


M17052

By Pressing Time, you can set the current time. Example display shows 8:15 AM.



NOTE: If the current time is Daylight Savings Time, press **Daylight Time** until *DST* displays.



M17053

By Pressing Daylight Time, you can set Daylight Savings Time.



4. Press **Run Program** to return to normal operation.

Setting System and Fan

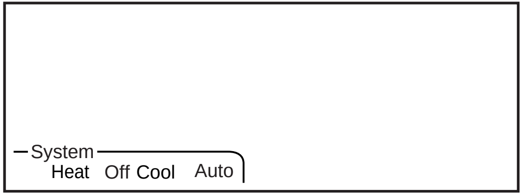
The system default setting is Heat and the fan default setting is Auto. Use the System and Fan keys to change the settings. The fan settings can be set for each schedule period individually. The system selection is for all the schedule periods.

Set System



Press **System** until the desired system displays (Heat, Off, Cool, or Auto).

Heat: The thermostat controls the heating.
Off: Both the heating and cooling are off.
Cool: The thermostat controls the cooling.
Auto: The thermostat automatically changes between heating and cooling operation, depending on the indoor temperature.



M17054

Set Fan



Press **Fan** until the desired mode displays (On or Auto).

On: Fan operates continuously.
Auto: Fan operates only when heating or cooling.

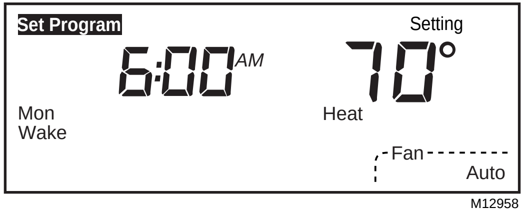


M17055

7-Day Program and Operation

Your thermostat comes preset for 7-Day Operation unless otherwise noted on page 6. After reviewing the options following this section, you may find that 24-Hour Operation or Constant Temperature Setpoint Programming is better for you and your family. If so, please consult your Trane dealer or service technician.

During 7-Day Operation, you can set your thermostat for four periods (Wake, Leave, Return and Sleep) and up to eight temperatures (four Heat and four Cool) for each day of the week. Each day can be the same or different.



During 7-Day Operation, one day of the week displays in program mode (Monday is shown in the example).

7-Day Preprogrammed Schedule

If your thermostat is set for 7-Day Operation, follow the steps below. Otherwise, refer to 24-Hour Program and Operation, or Constant Temperature Setpoint Programming.

The preprogrammed schedule is shown in Table 1 (same schedule for all days of the week). You may keep this schedule or organize your own.

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Table 1. 7-Day Preprogrammed Schedule.

	WAKE	LEAVE	RETURN	SLEEP
SUNDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75
MONDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75
TUESDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75
WEDNESDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75
THURSDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75
FRIDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75
SATURDAY	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75

Customizing Your Own 7-Day Schedule

Before starting the programming procedure, use Tables 2 and 3 to organize your schedule. The preprogrammed schedule is shown in Table 1. Four time periods are available for each day of the week – WAKE, LEAVE, RETURN, and SLEEP.

A Word About Power Outages

Don’t worry! Your thermostat retains the schedule (preprogrammed or your own) for the life of the product. The clock and day information is retained for a minimum of ten minutes during a power outage. After a longer power outage, the current time and day may need to be set (*1:00 PM* flashes on the display), but the schedule is retained.

Instructions

1. Write in the time you want each schedule period to begin.
2. Write in the heating temperature (H) and cooling temperature (C) you want for each period.
3. Circle the fan operation you desire for each period.
4. Begin with Programming the First Day!

Pressed the wrong key?
Want to start over?

Don’t worry! You can always press



to return display to normal.

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Table 2. Your 7-Day Schedule.

	WAKE	LEAVE	RETURN	SLEEP
SUNDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
MONDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
TUESDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
WEDNESDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
THURSDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
FRIDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
SATURDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C

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Table 3. An Extra 7-Day Schedule.

	WAKE	LEAVE	RETURN	SLEEP
SUNDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
MONDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
TUESDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
WEDNESDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
THURSDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
FRIDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C
SATURDAY	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C

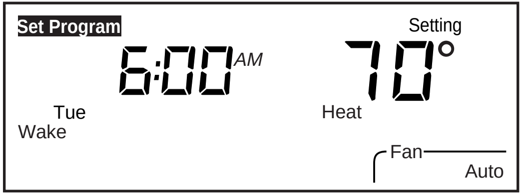
Programming the First Day

To modify the preprogrammed schedule, start by programming the Wake time and temperature and fan operation for any one day:

NOTE: This schedule follows the current day and time you set in the section *Setting Current Day and Time* and the Heat or Cool setting and Fan setting you selected in the section *Setting System and Fan*.



1. Press **Wake**.

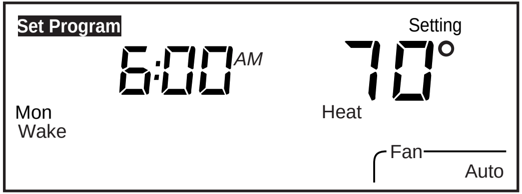


M17056

By pressing Wake, you enter the program mode.
Example display shows 6:00 AM on Tuesday with Heat set to 70°F.

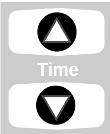


2. Press **Day** until the desired day displays.



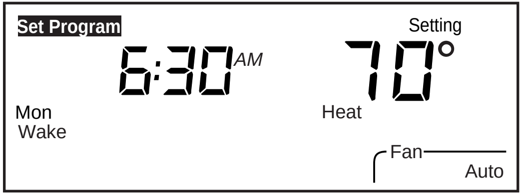
M17057

By pressing Day, you select the day to program.
Example display shows Monday is selected and ready to program.



3. Press **Time** ▲ or **Time** ▼ until the desired Wake time displays.

   NOTE: The program times are in fifteen-minute intervals. (Example: 8:00, 8:15, 8:30).



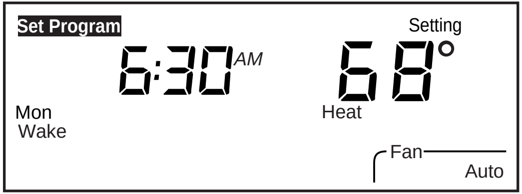
M17058

By pressing Time, you select the time the Wake period will begin.
Example display shows the Wake period will begin at 6:30 AM.



4. Press **Increase ▲** or **Decrease ▼** until the desired Wake temperature displays.

NOTE: The setpoint temperature range is 55 to 85°F (13 to 29°C) for heating and 65 to 99°F (18 to 37°C) for cooling.



M17059

By pressing **Increase ▲** or **Decrease ▼**, you select the temperature for the Wake period. Example display shows the heating Wake period set for 68°.

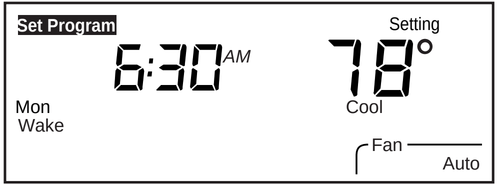


NOTE: Press **Fan** to modify fan operation. **Auto** means the fan runs only when the heating or cooling equipment is operating. **On** means the fan runs continuously for the entire schedule period.



5. Press **Heat/Cool Settings** to make selections for the opposite system setting (either Heat or Cool).

NOTE: If your system is set for Heat, only the heating temperature will be used. Similarly, if your system is set for Cool, only the cooling temperature will be used. If your system is set for Auto, either the heating or cooling temperature may be used depending on the temperature of the room.

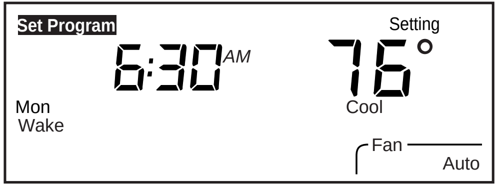


M17060

By pressing Heat/Cool Settings, you select the cooling system (if you already set the heating temperature). The current setting displays. Example display shows the cooling system was previously set for 78°.



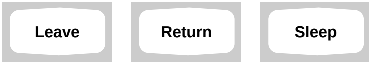
6. Press **Increase** ▲ or **Decrease** ▼ until the desired temperature setpoint displays.



M17061

By pressing **Increase** ▲ or **Decrease** ▼, you select the cooling Wake temperature.Example display shows the cooling Wake period set for 76°.

7. Press **Leave**, **Return** or **Sleep** and repeat steps 3, 4, 5 and 6 for programming the rest of the day. The day is now programmed (first day of a seven-day schedule).



IMPORTANT

Repeat steps 1 through 7 for each day of the week that has a different schedule from the first day. Or, refer to the section ***Copying a Day*** *to copy any programmed day to another.*



8. Press **Run Program** to return to normal operation.

Pressed the wrong key? Want to start over?

Don't worry! You can always press



to return display to normal.

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Copying a Day

NOTE: The copy feature applies only to 7-Day Operation. The thermostat must be in the program mode to use the copy feature. Go to step 2 if the thermostat is already in the program mode (Set Program displays in upper left corner).

1. Press **Wake**, **Leave**, **Return** or **Sleep** to enter program mode.





2. Press **Day** to select the day to copy from.



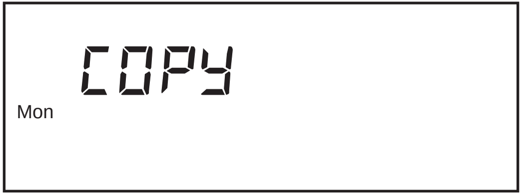
M17062

By pressing Day, you select which day's schedule to copy. Example display shows the thermostat in program mode with Monday ready to be copied.

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3. Press **Copy**.

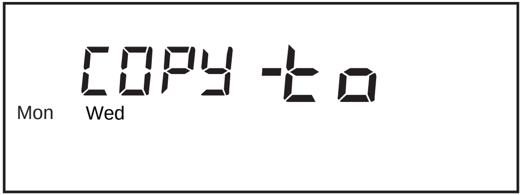


M17063

By pressing Copy, you copy a day's schedule into memory. Example display shows Monday's schedule has been copied into memory.



4. Press **Day** until the day to be copied to is displayed.



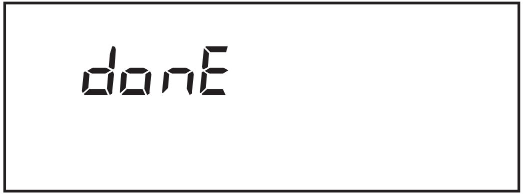
M17064

By pressing Day again, you select which day to copy to. Example display shows Monday and Wednesday. Since Monday was already selected, Monday's schedule will be copied to Wednesday.



5. Press **Copy**.

NOTE: *donE* displays for two seconds before the normal display returns.



M17065

By pressing Copy again, you complete the copy command. Example display shows *donE.* Monday's schedule was successfully copied to Wednesday (Monday and Wednesday now have the same schedule).

6. Repeat steps as necessary for all the periods and days desired.



7. Press **Run Program** to return to normal operation.

Clearing Schedule Period

Suppose you want to skip a schedule period or periods for a particular day because you don't need them. For example, if Saturday is a day you normally stay at home from school or work, you can clear the Leave and Return periods for this day and keep the Wake and Sleep periods. You can always reprogram the periods later.

NOTE: The clear feature applies to 7-Day and 24-Hour Operation. The thermostat must be in the program mode to use the clear feature. Go to step 2 if the thermostat is already in the program mode (Set Program displays in upper left corner).

1. Press **Leave**, **Return** or **Sleep** to enter program mode.





M17066

By pressing Leave, Return, or Sleep, you enter the program mode.
Example display shows 8:00 AM on Monday in the Leave period, with Heat set for 62°



2. For 7-Day Operation, press **Day** until the desired day displays. For 24-Hour Operation, skip to step 3.



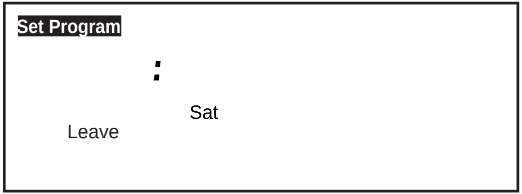
M17067

Press Day to select which day to begin clearing periods. Example display shows Saturday is selected

3. Press and hold **Leave**, **Return** or **Sleep** until the start time and temperature setting are cleared (approximately 3 seconds).



NOTE: **Wake** cannot be cleared.



M17068

By pressing and holding Leave, Return or Sleep, the period for that day is cleared. Example display shows Saturday's Leave period has been cleared.

You do not have to program a replacement time for the remaining periods, for example Wake and Sleep. If you cleared only the Leave and Return periods for Saturday (or any day), the thermostat remains in the Wake period for all of Saturday until the Sleep period.

4. Repeat steps as necessary for all the periods to be cleared.

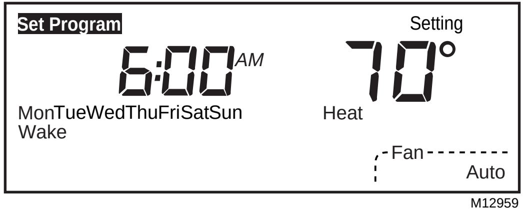


5. Press **Run Program** to return to normal operation.

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24-Hour Program and Operation

24-Hour Operation is the same as 7-Day Operation except the same program repeats itself each day. Monday through Sunday follows the same exact schedule (four periods and up to eight temperatures).



During 24-Hour Operation, all days of the week display in program mode.

24-Hour Preprogrammed Schedule

If your thermostat is set for 24-Hour Operation, follow the steps below. Otherwise, refer to 7-Day Program and Operation, or Constant Temperature Setpoint Programming.

The preprogrammed schedule is as follows (same schedule for all days of the week): You may keep this schedule or organize your own.

Table 4. 24-Hour Preprogrammed Schedule.

	WAKE	LEAVE	RETURN	SLEEP
Program Repeats Every 24 Hours	TIME 6:00 AM FAN AUTO H 70 C 78	TIME 8:00 AM FAN AUTO H 62 C 85	TIME 5:00 PM FAN AUTO H 70 C 78	TIME 10:00 PM FAN AUTO H 62 C 75

Customizing Your Own 24-Hour Schedule

Before starting the programming procedure, use Tables 5 and 6 to organize your schedule. The preprogrammed schedule is shown in Table 4. Four time periods are available—WAKE, LEAVE, RETURN, and SLEEP.

Table 5. Your 24-Hour Schedule.

	WAKE	LEAVE	RETURN	SLEEP
Program Repeats Every 24 Hours	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C

Instructions

1. Write in the time you want each schedule period to begin.
2. Write in the heating temperature (H) and cooling temperature (C) you want for each period.
3. Circle the fan operation you desire for each period.
4. Begin programming.

Table 6. An Extra 24-Hour Schedule.

	WAKE	LEAVE	RETURN	SLEEP
Program Repeats Every 24 Hours	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C	TIME FAN AUTO ON H C

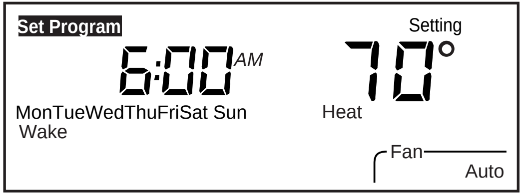
Programming Your 24-Hour Schedule

To program the Wake time and temperature and fan operation:

NOTE: This schedule follows the current day and time you set in the section *Setting Current Day and Time* and the Heat or Cool setting and Fan setting you selected in the section *Setting System and Fan*.

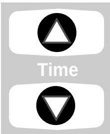


1. Press **Wake**.



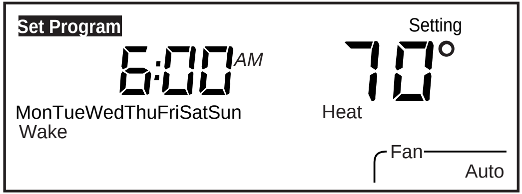
M17069

By pressing Wake, you enter the program mode. Example display shows 6:00 AM with Heat set to 70°F.



2. Press Time ▲ or Time ▼ until the desired Wake time displays.

   NOTE: The program times are in fifteen minute intervals. (Example: 8:00, 8:15, 8:30).



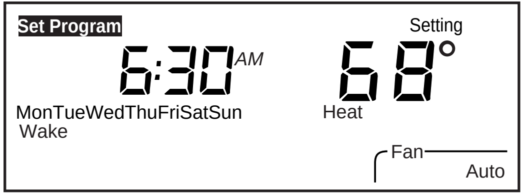
M17070

By pressing Time, you select the time the Wake period will begin. Example display shows the Wake period will begin at 6:30 AM.



3. Press **Increase ▲** or **Decrease ▼** until the desired Wake temperature displays.

NOTE: The setpoint temperature range is 55 to 85°F (13 to 29°C) for heating and 65 to 99°F (18 to 37°C) for cooling.



M17071

By pressing **Increase ▲** or **Decrease ▼**, you select the temperature for the Wake period. Example display shows the heating Wake period set for 68°.



NOTE: Press **Fan** to modify fan operation. **Auto** means the fan runs only when the heating or cooling equipment is operating. **On** means the fan runs continuously for the entire schedule period.

Heat/Cool Settings

4. Press **Heat/Cool Settings** to make selections for the opposite system setting (either Heat or Cool).

NOTE: If your system is set for Heat, only the heating temperature will be used. Similarly, if your system is set for Cool, only the cooling temperature will be used. If your system is set for Auto, either the heating or cooling temperature may be used depending on the temperature of the room.



M17072

By pressing Heat/Cool Settings, you select the cooling system (if you already set the heating temperature). The current setting displays. Example display shows the cooling system was previously set for 78°.

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5. Press **Increase ▲** or **Decrease ▼** until the desired temperature setpoint displays.



M17073

By pressing **Increase ▲** or **Decrease ▼**, you select the cooling Wake temperature. Example display shows the cooling Wake period set for 76°.

6. Press **Leave**, **Return** or **Sleep** and repeat steps 2, 3, 4, and 5 for programming the rest of the day. The week is now programmed.

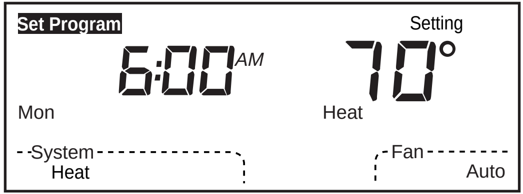




7. Press **Run Program** to return to normal operation.

Constant Temperature Setpoint Programming

Unlike the first two options, Constant Temperature Setpoint Programming does not have the Wake, Leave, Return and Sleep periods. The temperature is set by pressing the ▲ and ▼ keys.



The four periods (for example, Wake) are absent from the display in this mode.

Setting Temperature and Fan Operation

If your thermostat is set for Constant Temperature Setpoint Programming, follow the steps below. Otherwise, refer to 7-Day Program and Operation, or 24-Hour Program and Operation.

To set the temperature and fan operation:

NOTE: Refer to the section *Setting Current Day and Time* to set the current day and time, and the section *Setting System and Fan* to set the system and fan.

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1. Press **Increase** ▲ or **Decrease** ▼ until the desired temperature displays.

   NOTE: The setpoint temperature range is 55 to 85°F (13 to 29°C) for heating and 65 to 99°F (18 to 37°C) for cooling.



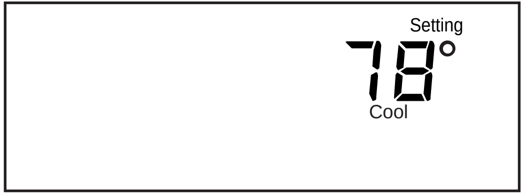
M17119

By pressing **Increase** ▲ or **Decrease** ▼, you select the heating temperature. Example display shows Heat is set for 68°.

NOTE: Press **Fan** to modify fan operation. **Auto** means the fan runs only when the heating or cooling equipment is operating. **On** means the fan runs continuously for the entire schedule period.

2. Press **Information** i key to make selections for the opposite system setting (works like the **Heat/Cool Settings** key).

3. Press **Increase ▲** or **Decrease ▼** until the desired temperature setpoint displays.



M17075

By pressing **Increase ▲** or **Decrease ▼** after pressing i, you select the cooling temperature. Example display shows Cool is set for 75°.

NOTICE: This equipment is a Class B digital apparatus, which complies with Canadian Radio Interference Regulations, CRC c. 1374.

⚠ CAUTION

Equipment Damage Hazard.
Can cause permanent damage to the compressor or other equipment.
To avoid possible equipment damage, do not operate cooling when outside temperature is below 50°F (10°C). See equipment manufacturer instructions. To avoid possible compressor damage, allow the compressor to remain off for five minutes before restarting.

TROUBLESHOOTING GUIDE

Symptom	Possible Cause	Action
Display does not come on.	Thermostat is not being powered.	Check if the thermostat is mounted and latched on the wallplate—mount and latch the thermostat on the wallplate. Check if the circuit breaker is tripped—reset the circuit breaker. Check if the fuse is blown—replace the fuse. Check if the system switch at the equipment is in the Off position—set to the On position. Check wiring between thermostat and HVAC equipment—replace any broken wires. If 24 Vac is present, proceed with troubleshooting.
Temperature setting does not change (Example: cannot set the heating higher or the cooling lower).	The upper or lower temperature limits were reached.	Check that the temperature setpoints are: Heating: 55 to 85°F (13 to 29°C) Cooling: 65 to 99°F (18 to 37°C).

(continued)

Troubleshooting Guide (continued)

Symptom	Possible Cause	Action
Heating does not come on.	No power to the thermostat. System selection is not set to Heat. Heating setpoint is below room temperature.	Check that setpoint is above room temperature. Check if the circuit breaker is tripped—reset the circuit breaker. Check if the fuse is blown—replace the fuse. Check if the system switch at the equipment is in the Off position—set to On position. If 24 Vac is present, proceed with troubleshooting. Wait five minutes for the system to respond (thermostat displays *Wait*). Set system selection to Heat.
Cooling does not come on.	No power to the thermostat. System selection is not set to Cool. Cooling setpoint is above room temperature.	Check that setpoint is below room temperature. Check if the circuit breaker is tripped—reset the circuit breaker. Check if the fuse is blown—replace the fuse. Check if the system switch at the equipment is in the Off position—set to On position. If 24 Vac is present, proceed with troubleshooting. Wait five minutes for the system to respond (thermostat displays *Wait*). Set system selection to Cool.

(continued)

Troubleshooting Guide (continued)

Symptom	Possible Cause	Action
System on indicator (flame=heat, snowflake=cool) is lit, but no warm or cool air is coming from the registers.	Heating/cooling equipment turns on the fan when the equipment has reached the setpoint.	Wait a minute after seeing the flame or snowflake and then check the registers.
System on indicator reads *Filter* and backlight is flashing.	Filter expired.	Refer to the *Filter Indication* section.
Outdoor temperature not displayed or is incorrect.	Filter expired.	Press  twice for outdoor temperature when filter expiration shows on display. Refer to the *Filter Indication* section.
	Installer did not activate this option. Outdoor sensor is connected incorrectly.	Contact installer or service technician.

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DEFINITIONS

Adaptive Intelligent Recovery™ Control
Adaptive Intelligent Recovery™ Control is the factory default setting that allows you to choose the exact time the room reaches your comfort temperature, as opposed to conventional recovery.

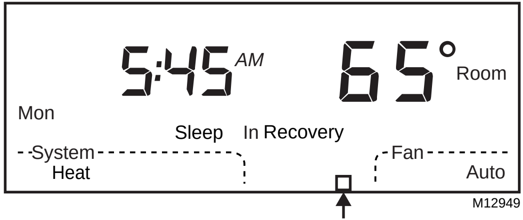
Adaptive Intelligent Recovery™ Modes

WAKE	You choose the exact time the room reaches your comfort temperature after the SLEEP period.
LEAVE	You choose the time you want your heating or cooling system to start an energy-savings mode while you are away (lower temperature during heating season, and higher temperature during cooling season) – follows WAKE period.
RETURN	You choose the exact time the room reaches your comfort temperature after the energy-savings LEAVE period.
SLEEP	You choose the time you want your heating or cooling system to start an energy-savings mode while you sleep-follows RETURN period.

Conventional Recovery
Conventional recovery is an optional setting allows you to choose the exact time your heating or cooling system comes on to start recovery, as opposed to Adaptive Intelligent Recovery™ Control.

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If your thermostat is set to conventional recovery, a ❑ indication displays continuously, as shown on the example display.



Conventional Recovery Modes

WAKE — You choose the time you want your heating or cooling system to start to reach your comfort temperature after the SLEEP period. Adjust this time to earlier when you know it will take longer for the system to reach your comfort temperature. Adjust this time to later when you know the SLEEP temperature is closer to your WAKE temperature.

LEAVE — You choose the time you want your heating or cooling system to start an energy-saving mode while you are away (lower temperature during heating season, and higher temperature during cooling season) – follows WAKE period.

RETURN — You choose the time you want your heating or cooling system to start to reach your comfort temperature after the energy-savings LEAVE period.

SLEEP — You choose the time you want your heating or cooling system to start an energy-savings mode while you sleep-follows RETURN period.

Preprogrammed Schedule
The preprogrammed schedule consists of the four periods (Wake, Leave, Return and Sleep) and accompanying temperatures programmed into your thermostat at the factory. See Tables 1 and 4.

Period
One of the four times of the day (Wake, Leave, Return or Sleep) that you can program a setpoint or setpoints.

Setpoint
Setpoint is the temperature setting you select for a schedule or for a Hold. The setpoint can be either the heating temperature you set or the cooling temperature. Setpoint does not refer to actual room temperature or outdoor temperature.

System
System refers to either the heating and cooling mechanics. For example, when the System is set to Heat, the heating mechanics operate according to the heating setpoint. The thermostat selects the System when set to Auto. Some installations allow you to turn the System off (neither heating nor cooling will operate).

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LIMITED WARRANTY

Low Voltage Room Thermostats

This warranty is extended by American Standard Inc., to the original purchaser and to any succeeding owner of the real property to which the **Thermostat** is originally affixed, and applies to products purchased and retained for use within the U.S.A. and Canada.

If any part of your **Thermostat** fails because of a manufacturing defect within one year from the date of the original purchase, Warrantor will furnish without charge a new thermostat. **Any local transportation, related service labor and diagnosis calls are not included.**

This warranty does not cover failure of your **Thermostat** if it is damaged while in your possession or if the failure is caused by unreasonable use. In no event shall Warrantor be liable for incidental or consequential damages. **In no event shall any implied warranty of merchandise or fitness for use exceed the term of the limited warranty stated above.**

Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Parts will be provided by our factory organization or an authorized service organization in your area. All you need to do is look us up in the Yellow Pages or write to the address given below. If you wish further help or information concerning this warranty, contact:

American Standard Inc.
Troup Highway
Tyler, TX 75711-9010
Attention: Manager, After Sales Support

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CUSTOMER ASSISTANCE

If, after reading this guide, you have any questions concerning the operation of your thermostat, please call the Thermostat Customer Assistance Helpline at 1-877-880-3381, Monday-Friday, 7:00 am-5:30 pm, Central time.

For service, contact your local heating and cooling contractor.

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